WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2005NH36B

Title: Assessing Household Risk and Knowledge in Mitigating Nonpoint Source Pollution in Coastal Watersheds

Project Type: Research

Focus Categories: Water Quality, Models, Non Point Pollution

Keywords: water quality, nonpoint pollution, survey research, household production function

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Principal Investigators:
Robert Alex Robertson

Kristen B. Ward

Abstract

In recent years, the population within New England and other coastal areas in the United States has grown and is expected to continue in the future. Much of this growth occurred in rural and suburban areas north of Providence, RI and into southern New Hampshire and Maine (Robinson et al., 2004, pp4-5). The trend of increasing urbanization has lead to diminished surface and ground water quality in watersheds throughout the northeast and in other parts of the country. Subtle evidence of diminishing coastal water quality is observed through periodic episodes of eutrophication events such as “red tides” and other water quality warnings. For many individuals, the impacts of these episodes are limited and may only be experienced as a temporary nuisance, for example a beach closure or other marine-based restrictions, even though these events are symptomatic of larger ecological problems. We hypothesize that many individuals do not make the connection between household activities, such as consumptive water use, the application of fertilizers and pesticides on landscaped areas, other household activities and regional water quality. Moreover, in order to develop and administer public policies to mitigate the impacts of

nonpoint source water pollution from household activities, it is essential to gain an understanding of residents' level of knowledge, attitudes and preferences with respect to consumptive water use, household activities and water quality.